

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently amended) A solid polymer fuel cell comprising a plurality of unit cells stacked one after another, said unit cell comprising an anion exchange membrane and a cation exchange membrane disposed adjacent but not in contact with one another having catalyst layers on both sides thereof sandwiched between an electrode for fuel gas and an electrode for oxidizing gas, an electrode of an anion exchange membrane and an electrode of a cation exchange membrane disposed adjacent but not in contact with each other, gas diffusion layers commonly disposed on both sides of the outside of each of the electrodes for allowing electrons generated on the catalyst catalyst layers to pass, and interconnectors having a gas channel which are disposed outside the gas diffusion layers and serve as a current carrier having a gas channel current carriers.
2. (Currently amended) A fuel cell according to claim 1, wherein the gas passage interconnectors for supplying each unit cell with a gas is are disposed so as to connect at the portion of the gas diffusion layer layers contiguous to the anion exchange membrane with at the portion of the gas diffusion layer layers contiguous with the cation exchange membrane.
3. (Previously added) The fuel cell according to Claim 1, wherein the anion exchange membrane comprises a heat-resistant polymer having an anionic group.
4. (Currently amended) The fuel cell according to Claim 1, wherein the anion exchange membrane comprises Tosflex® a perfluorinated anion exchange membrane.

5. (Currently amended) The fuel cell according to Claim 1, wherein the cationic exchange membrane comprises Nafion®a perfluorinated cation exchange membrane.

6. (Previously added) The fuel cell according to Claim 1, wherein at least one of said gas diffusion layers comprises carbon paper.

7. (Previously added) The fuel cell according to Claim 1, wherein the cation exchange membrane and the anion exchange membrane are vertically disposed relative to each other.

8. (Previously added) The fuel cell according to Claim 1, wherein the gas channel crosses the cation exchange membrane and the anion exchange membrane at a plurality of points.

9. (Currently amended) The fuel cell according to Claim 1, wherein the plurality of unit cells of said fuel cell are stacked one after another ~~wherein said fuel cell comprises a plurality of anion exchange membranes and a plurality of cation exchange membranes disposed alternately on the same plane such that the anion exchange membranes and the cation exchange membranes of the fuel cell are alternately disposed in the same plane.~~

10. (Currently amended) The fuel cell according to Claim 9, wherein said fuel cell comprises a plurality of gas channels which cross the plane on which the ~~plurality of anion exchange membranes and a plurality of cation exchange membranes~~ are alternately disposed.

11. (Currently amended) A solid polymer fuel cell comprising a plurality of unit cells stacked one after another, said unit cell comprising an anion exchange membrane comprising a heat resistant polymer having an anionic group and a cation exchange membrane disposed adjacent but not in contact with one another having catalyst layers on both sides thereof sandwiched between an electrode for fuel gas and

an electrode for oxidizing gas, an electrode of an anion exchange membrane comprising a heat-resistant polymer having an ionic group and an electrode of a cation exchange membrane disposed adjacent but not in contact with each other, gas diffusion layers commonly disposed on both sides of the the outside of each of the electrodes for allowing electrons generated on the catalysts catalyst layers to pass, and interconnectors having a gas channel which are disposed outside the gas diffusion layers and serve as a current carrier having a gas channel current carriers.

12. (Currently amended) The fuel cell according to Claim 11, wherein the anion exchange membrane comprises ~~Tesflex® a perfluorinated anion exchange membrane.~~

13. (Currently amended) The fuel cell according to Claim 11, wherein the cationic exchange membrane comprises ~~Nafion® a perfluorinated cation exchange membrane.~~

14. (Previously added) The fuel cell according to Claim 11, wherein at least one of said gas diffusion layers comprises carbon paper.

15. (Previously added) The fuel cell according to Claim 11, wherein the cation exchange membrane and the anion exchange membrane are vertically disposed relative to each other.

16. (Previously added) The fuel cell according to Claim 11, wherein the gas channel crosses the cation exchange membrane and the anion exchange membrane at a plurality of points.

17. (Currently amended) The fuel cell according to Claim 11, wherein the plurality of unit cells of said fuel cell are stacked one after another wherein said fuel cell comprises a plurality of anion exchange membranes and a plurality of cation exchange membranes disposed alternately on the same plane such that the anion

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exchange membranes and the cation exchange membranes of the fuel cell are alternately disposed in the same plane.

18. (Currently amended) The fuel cell according to Claim 17, wherein said fuel cell comprises a plurality of gas channels which cross the plane on which the plurality of anion exchange membranes and a plurality of cation exchange membranes are alternately disposed.
